

IN THE CLAIMS

1. (Currently Amended) AM receiver comprising at least one IF filter with a fixed IF bandwidth, ~~characterized by comprising~~ at least one ~~downconversion~~ down-conversion stage (3, 4, 5) to shift the signal input thereto into an IF range (~~IF1~~) having a variable ~~oszillation~~ oscillation frequency (~~f<sub>LO1</sub>~~) which is adjustable to detune a wanted center frequency ( $f_c$ ) of a wanted signal part (30) from a center frequency ( $f_{IF1}$ ) of said at least one IF filter so that an unwanted signal part (31b) adjacent to said wanted signal part (30) lies outside said fixed IF bandwidth.
2. (Currently amended) AM receiver according to claim 1, ~~characterized by comprising~~ a baseband processing stage (12) which readjusts the detuned IF signal to a predetermined center frequency.
3. (Currently Amended) AM receiver according to claim 2, ~~characterized in that~~ wherein said baseband processing is ~~performed~~ performed digitally.
4. (Currently Amended) AM receiver according to claim 1, ~~characterized in that~~ wherein a ~~downconversion~~ down-conversion stage which readjusts the detuned IF signal to a predetermined center frequency.
5. (Currently Amended) AM receiver according to claim 1, ~~characterized in that~~ wherein it is a digital shortwave receiver, in particular a Digital Radio Mondial receiver.

6. (Currently Amended) AM receiver according to claim 1, ~~characterized in that~~  
wherein said at least one IF filter is an analogue filter.
7. (Currently Amended) AM receiver according to claim 1, ~~characterized in that~~  
wherein said fixed IF bandwidth is 20 kHz.
8. (Currently Amended) AM receiver according to claim 1, ~~characterized in that~~  
wherein said unwanted signal part (31b) is detected by analyzing the power of FFT carriers outside the wanted signal part (30), BER fine tuning in a digital baseband processing or during optimization of an Automatic Gain Control voltage.
9. (Currently Amended) Method to process a received AM signal wherein the received and eventually preprocessed AM signal gets shifted at least once into an IF range (IF1), ~~characterized by~~ comprising the step of detuning a wanted center frequency ( $f_c$ ) of a wanted signal part (30) from a center frequency ( $f_{IF1}$ ) used during at least one IF filtering with a fixed IF bandwidth so that an unwanted signal part (31b) adjacent to said wanted signal part (30) lies outside said fixed IF bandwidth.
10. (Currently Amended) Method according to claim 9, ~~characterized by~~ comprising the step of readjusting the detuned IF signal to a predetermined center frequency after said at least one IF filtering.

11. (Currently Amended) Method according to claim 9, ~~characterized in that~~ wherein it is used for digital shortwave reception, in particular Digital Radio Mondial reception.

12. (New) An Am receiver comprising:

an IF filter having a fixed bandwidth and a predetermined center frequency;

a down-conversion stage, arranged upstream from said IF filter, configured and adapted to receive an input signal having a desired signal component having a center frequency, wherein

said down-conversion stage is configured and adapted to shift said input signal into an IF range such that said center frequency of said shifted input signal is detuned from said center frequency of said IF filter.

13. (New) The AM receiver of claim 12, comprising a baseband processing stage, arranged downstream from said IF filter, configured and adapted to shift said detuned input signal to said center frequency of said IF filter.

14. (New) An AM receiver comprising:

an IF filter having a fixed bandwidth;

a down-conversion stage, arranged upstream from said IF filter, configured and adapted to receive an input signal having a desired signal component and an undesired signal component adjacent said desired signal component in the frequency domain, wherein

said down-conversation stage is configured and adapted to shift said input signal into an IF range such that said undesired signal component lies at least partially outside said

bandwidth of said IF filter.

15. (New) The AM receiver of claim 14, wherein
- said IF filter has a predetermined center frequency,
  - said desired signal component has a center frequency, and
  - said down-conversion stage is moreover configured and adapted to shift said input signal into said IF range such that said center frequency of said shifted input signal is detuned from said center frequency of said IF filter.